



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

May 29, 2015

Chicago Department of Public Health
Julie Morita, MD, Commissioner

What is the risk?

Currently, the risk of influenza infection is low. Influenza viruses are detected throughout the year at low levels and can cause disease. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated, annually. This will be the last *Chicago Flu Update* issued for the 2014-2015 influenza surveillance season. The next update will be issued in October 2015. CDPH will continue to monitor surveillance indicators throughout the summer months.

Are severe cases of influenza occurring?

The Illinois Department of Public Health (IDPH) has issued [influenza testing and reporting guidelines](#)¹. Suspected novel and variant influenza, pediatric influenza-associated deaths, influenza-associated ICU hospitalizations and outbreaks of influenza-like illness in a congregate setting should all be reported to CDPH via [INEDSS](#)².

For the week of May 17-23, 2015, two influenza-associated ICU hospitalizations were reported; one was positive for influenza A (H1N1)pdm09 and one was positive for influenza B.

Since September 28, 2014, 299 influenza-associated ICU hospitalizations have been reported (**Figure 1**). Among the total ICU hospitalizations reported, 216 were positive for influenza A (110 H3N2, 3 H1N1pdm09, and 103 unknown subtype [subtyping not attempted or not all subtypes tested]) and 83 were positive for influenza B. One hundred thirty-one (44%) were non-Hispanic Black, 156 (52%) were female, and 188 (63%) were 50 years of age or older (median age of 60 years with a range of 1 month -101 years). Ninety-six (32%) had reported lung disease (including asthma) and 75 (25%) required ventilator support. Twenty-six deaths among ICU hospitalizations have been reported.

How much influenza-like illness is occurring?

CDPH receives data from nearly 60 surveillance sites across Chicago, which report the total number of patient visits seen weekly, and of those visits, the number with influenza-like illness (ILI) (i.e., fever of 100° F or greater, with cough or sore throat). All hospitals in Chicago that provide emergent care are required to report on a weekly basis the total number of emergency department visits, and of those visits, the number with ILI. For the week of May 17-23, 2015 (week 20), with 11 hospitals reporting, 2.7% of emergency department visits were due to ILI (**Figure 2**).

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. ILI activity is determined solely based on the patient's chief complaint and does not take into account the entire medical record, as the ILI activity reported in **Figure 2** does. Currently, 10 Chicago hospitals submit data to ESSENCE. For the week of May 17-23, 2015, 1.0% of emergency department visits were due to ILI (**Figure 3**).

Figure 1. Number of influenza-associated intensive care unit hospitalizations reported for Chicago residents, for current season (2014-2015) and previous season (2013-2014), October-May.

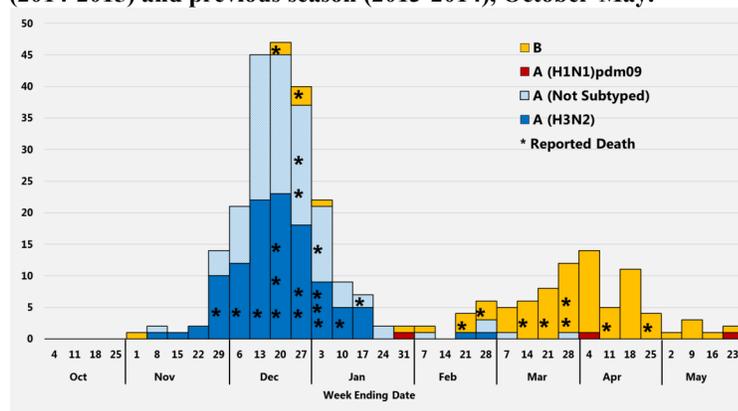
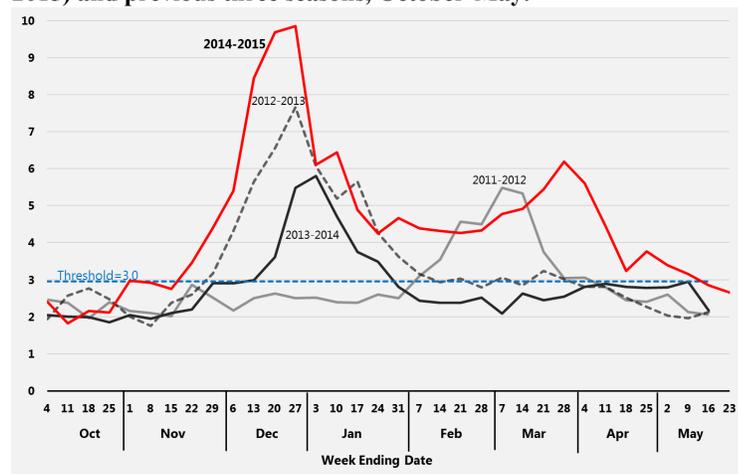


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for the current season (2014-2015) and previous three seasons, October-May.



¹http://www.idph.state.il.us/flu/OHPLabs-Influenza_annual_Testing_and_Reporting_Memo_01_10-2-2014.pdf; ²<https://dph.partner.illinois.gov/>

Several outpatient clinics and two large outpatient clinic networks located in Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by reporting on the number of patients with ILI seen weekly. From May 17-23, 2015 with 35 facilities reporting, 2.7% of visits were due to influenza-like illness (Figure 4).

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza subtyping. For the week of May 17-23, 2015, with 5 laboratories reporting, 2 of the 371 (<1%) specimens tested for influenza were positive. Among this week's positive specimens, 1 was positive for influenza A (H1N1) pdm09 and 1 was positive for positive influenza B (Figure 4).

Since September 28, 2014, 2,581 of 19,406 (13%) specimens tested for influenza have been positive; 1,823 typed as influenza A (12 H1N1pdm09, 1,492 H3N2 and 319 unknown subtype) and 758 were typed as influenza B.

Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](#)³ report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to [Illinois](#)⁴ and [Suburban Cook County](#)⁵ are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section [Current Flu Situation in Chicago](#)⁶. In 2013, the Metropolitan Chicago Healthcare Council (MCHC) and CDPH released "[Stop the Spread: A Health Care Guide to Influenza Preparedness](#)"⁷. This report provides an overview of influenza, its impact on public health and how hospitals can prepare for, mitigate the impact of and respond to influenza infections and outbreaks.

The 20th Annual Chicago Infection Control Conference
 June 8th, 2015
 The Chicago Cultural Center
 78 E. Washington St, Chicago, IL., 60602
[Click Here to Register](#)

Figure 3. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2014-2015) and the previous three seasons, October-May.

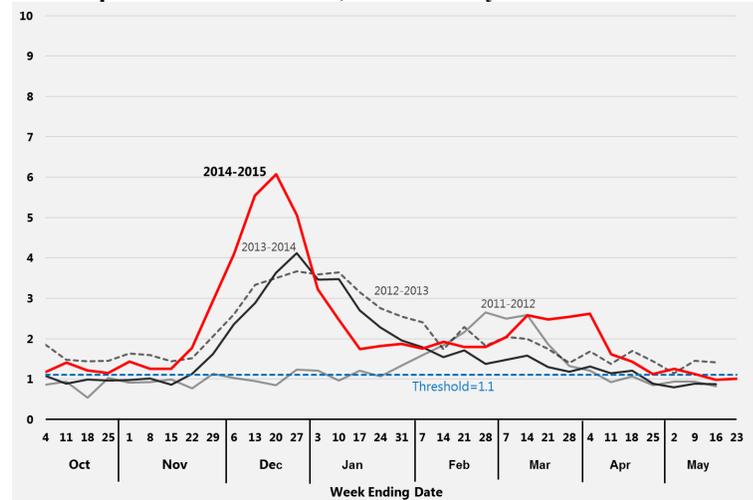


Figure 4. Percent of medically attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2014-2015) and the previous three seasons, October-May.

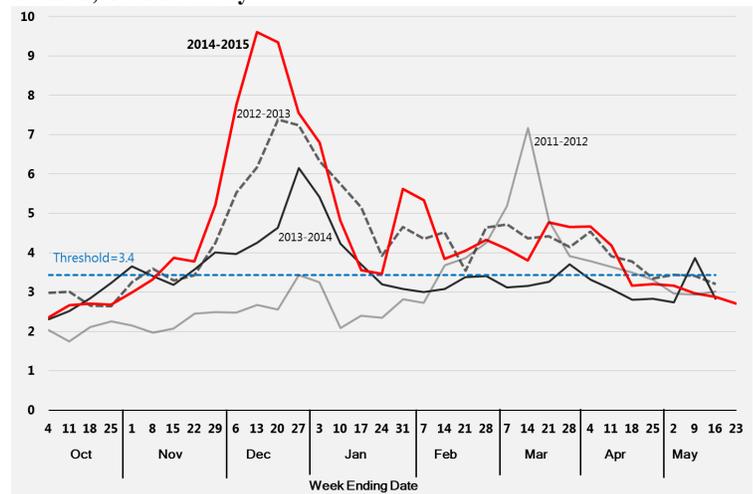
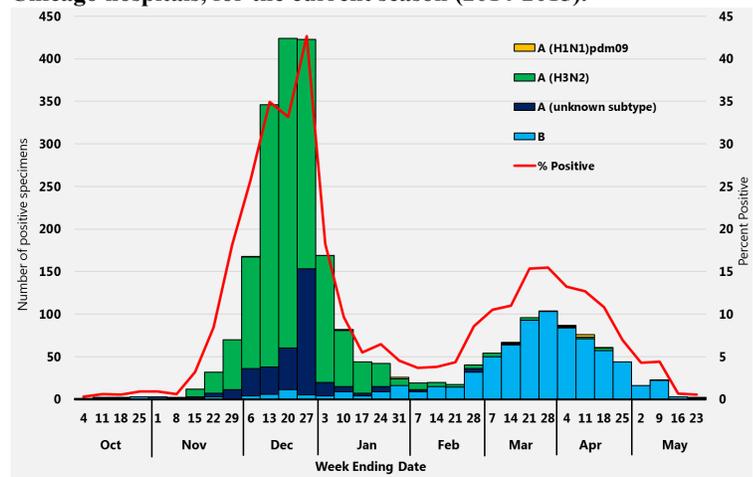


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2014-2015).



³<http://www.cdc.gov/flu/weekly/index.htm>; ⁴<http://www.idph.state.il.us/flu/surveillance.htm>; ⁵<http://www.cookcountypublichealth.org/data-reports#Influenza>; ⁶http://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/current_flu_situationinchicago2011.html; ⁷https://www.mchc.com/wp-content/uploads/2014/11/MCHC_Influenza_2013.pdf
 All data are preliminary and may change as more reports are received.